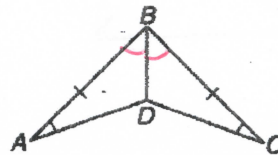


Unit 4 Worksheet 7 ASA and AAS

Fill in the reasons for the proof.

1. **Given:** $\overline{AB} \cong \overline{CB}$, $\angle A \cong \angle C$, \overline{DB} bisects $\angle ABC$

Prove: $\triangle ABC \cong \triangle CBD$

STATEMENTSREASONS

1. $AB \cong CB$

1. GIVEN

2. $\angle A \cong \angle C$

2. GIVEN

3. DB bisects $\angle ABC$

3. GIVEN

4. $\angle ABD \cong \angle CBD$

4. DEFINITION OF A BISECTOR

5. $\triangle ABC \cong \triangle CBD$

5. ASA

2. **Given:** S is the midpoint of \overline{QT} , and $\overline{QR} \parallel \overline{TU}$

Prove: $\triangle QSR \cong \triangle TSU$

STATEMENTSREASONS

1. S is the midpoint of QT

1. GIVEN

2. $QR \parallel TU$

2. GIVEN

3. $QS \cong TS$

3. DEFINITION OF A MIDPOINT

4. $\angle QRS \cong \angle TSU$

4. ALT. INT. \angle s

5. $\angle QSR \cong \angle TSU$

5. VERTICAL \angle s

6. $\triangle QSR \cong \triangle TSU$

6. AAS

For #3- 16, decide if you will use SSS, SAS, ASA, AAS or NONE to prove the triangles congruent.

